Outsourcing: Vendor Characteristics

Paper 1

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The information systems (IS) outsourcing revolution is spreading. IS expenditures are already over $12 billion and may exceed $40 billion in five years: Some of the world's largest companies are participating. This paper is one of a series that provide a strategic assessment of the IS Revolution:

- Outsourcing: Directions and Opportunities
- Outsourcing: Buyers' Perspectives
- Outsourcing: Contracting and Implementation
- Outsourcing: Vendor Characteristics

This series examines the rationale for IS outsourcing; the different types of IS outsourcing (it does not just apply to computer centers!); and the new opportunities in transition management, desktop services, and business operations outsourcing.

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Outsourcing: Vendor Characteristics

Definitions

EXHIBIT 1

IS Outsourcing Definition

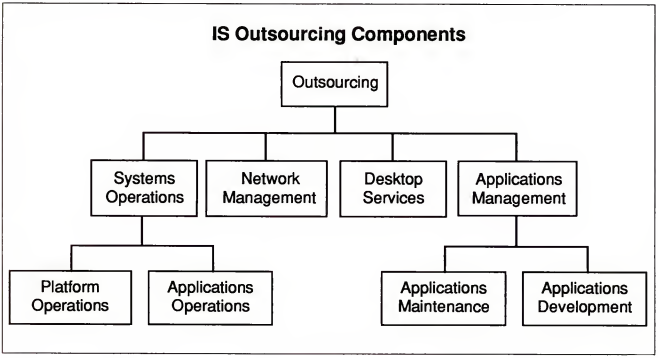
Information systems (IS) outsourcing is the contracting of an IS process or function to an external vendor on a long-term (1+ years) basis.

The various IS outsourcing segments are, as shown in Exhibit 2,

1. Systems Operations - Contracting to a vendor the information systems operations in either of two ways:

- *Platform Systems Operations* - The vendor is responsible for managing the computer systems and their associated networks.

EXHIBIT 2



- *Applications Systems Operations* - The vendor is responsible for developing and/or maintaining a client's applications software as well as operating and managing the computer systems and their associated networks.

2. Network Management - Contracting to a vendor for the operations and management of the computer-related telecommunications network, transmitting data and text, voice, image, and video as required. Voice-only network operations are not part of information systems outsourcing.

3. Desktop Services - Contracting to a vendor for the deployment, maintenance, support, and connectivity of the organization's PC/workstation inventory. The service may also include performing the "help desk" function.

4. Applications Management - The vendor is responsible for the development and maintenance of all the applications systems a client uses to support a business operation.

- *Applications Development* - Contracting for the design, development, maintenance and enhancement of new applications software associated with a business operation.

- *Applications Maintenance* - Contracting only for the maintenance of the existing applications software associated with a business operation.

Information systems outsourcing is distinguished from systems integration in the following way: Systems integration is project-oriented, i.e., there is a definable start and end point to the relationship other than the contract period. Systems operations and other forms of outsourcing are process-oriented, i.e., there is a continuing relationship. (See Exhibit 3.)

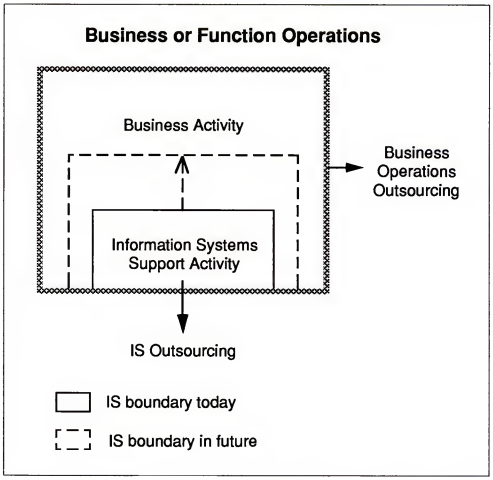
EXHIBIT 3

Systems Outsourcing vs. Systems Integration

- Systems outsourcing is *function*- or process-oriented
- Systems integration is *project*-oriented

Another area of outsourcing that relates to IS outsourcing is that of business or function operations. As depicted in Exhibit 4, a business activity that encompasses an IS activity can be outsourced. In some cases, the proportion of the business activity that is due to IS can be high as, for example, in credit card operations or airline reservations. In other cases it may be low, as in textile manufacturing.

EXHIBIT 4



When a business function is outsourced it includes the people and other organizational elements as well as IS.

In the 1990s the boundary between "IS" and non-IS inside a business function will be increasingly blurred. This will make the distinction between IS outsourcing and business function outsourcing more difficult to make, and perhaps less relevant.

Introduction

The Information Systems (IS) outsourcing revolution is spreading. IS expenditures are already over $12 billion and may exceed $40 billion in five years. Some of the world's largest companies are participating.

This paper is one of a series that provides a strategic assessment of the IS Revolution.

- *Outsourcing: Directions and Opportunities*

  This report examines the rationale for IS outsourcing; the different types of IS outsourcing (it does not just apply to computer centers!); and the new opportunities in transition management, desktop services, and business operations outsourcing.

- *Outsourcing: Buyers' Perspectives*

  This study focuses on outsourcing from the buyers' perspective and provides brief case studies covering several types of IS outsourcing. Examples are provided for transition management, applications maintenance, platform systems operations, applications systems operations, and desktop services.

- *Outsourcing: Selecting a Vendor*

  This report characterizes and categorizes vendor strategies and provides a framework for assessing vendor capabilities in various categories of outsourcing. Selected descriptions of individual outsourcing vendors and their capabilities are included.

- *Outsourcing: Successful Contracting and Implementation*

  This study addresses the outsourcing decision process and the factors impacting decisions and vendor selection. It presents ideas for managing the partnership. It discusses "insourcing." The last section provides a framework for assessing benefits from outsourcing.

The objective of this paper is to characterize and categorize vendor strategies. Vendors focusing on outsourcing come from various backgrounds, have a variety of skills and orientations, and therefore fit differing client requirements. The study offers

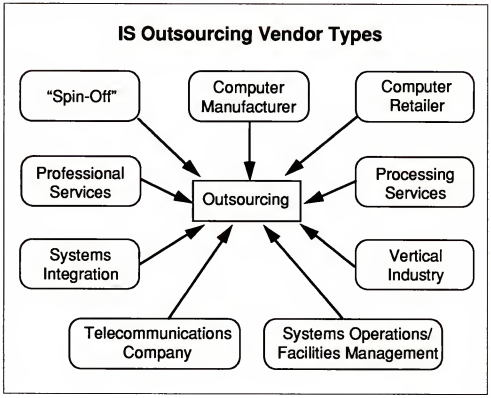
- A framework to categorize the vendors against IS requirements
- A review of the performance of systems integration and systems operations vendors
- A look at how the vendors help IS deal with the internal IS staff relative to an outsourcing decision
- A framework for assessing vendor capabilities in the various categories of outsourcing
- Selected descriptions of individual outsourcing vendors and their capabilities.

Vendor Categorization

Just as systems integration attracted IS vendors from every segment of the industry, so has outsourcing. as Exhibit 5 depicts. Hardware vendors expanding services, processing services companies adding application support, and professional services firms adding processing services are all changes currently under way as a result of this trend.

Vendors bring different strengths, assets, and backgrounds to meeting the outsourcing requirements of the 1990s. As a result, their strategies differ in significant ways.

EXHIBIT 5



- A computer manufacturer may be approaching systems operations defensively to protect its installed base and services revenue stream. It brings a very strong services infrastructure and operating organization, but it is not applications-oriented and tends to be uni-vendor in orientation.

- The professional services or systems integration vendor brings the ability to perform project-oriented assignments, but may not have the proven capabilities to manage complex computer and network operations.

- Vertical industry specialists (e.g., in banking or health care) can often provide the core applications software and processing. Yet they may not have the skills to provide maintenance and support for internally developed software if that is to be part of the outsourcing agreement. They also are most expert at medium-sized contracts.

- Computer retailers and distributors are entering the outsourcing market for desktop services. JWP and Computerland in the U.S. have such contracts. Several European distributors are being much more aggressive, however.

- Today's processing services and systems operations vendors that are not vertical industry specialists either take over and run the client's data center or shut it down and shift to an off-site, multiclient center. These vendors may not want to take advantage of downsizing changes because this will reduce the value of core investments in their large data centers.

- Telecommunications companies understand the network areas extremely well. Several of them, such as Bell Atlantic and Bell South, have extensive support capabilities particularly appropriate to desktop services outsourcing. They tend to be weaker in applications and project management capabilities.

- "Spin-offs" vary widely in scope and capability of service. These companies are formed from in-house IS units. They can give very good prices and services, but usually do not have much else to offer. Care must be taken by the buyer to protect itself against policy changes by the spin-off's parent.

- Traditional systems operations/facilities management companies have broadened their approaches to the IS outsourcing markets. They now offer a portfolio of such services and in several cases, such as EDS and First Data Corp. (American Express), will offer business operations.

It is important to understand the capabilities of a potential outsourcing vendor, and those it is trying to add to expand its service offerings.

Outsourcing and Systems Integration Expenditures

A quick review of INPUT's research into systems integration and outsourcing provide a number of insights on the similarities and differences between these "responsibility" services.

1. Forecasted Expenditures

Exhibit 6 and 7 show the 1992-1997 forecasted expenditures for systems integration and outsourcing. Both are strong growth sectors for the information services industry.

These forecasts are based on users' shifting their buying patterns towards the more comprehensive services as described in this report. However, they are "evolutionary" rather than "revolutionary," i.e., they assume steady growth rather than massive, unpredicted shifts. The potential for revolutionary shifts in outsourcing is large. The reason for the potential for very large growth in outsourcing is that it simply represents a "transfer" of current expenditures from an internal "cost" to an external "market."

EXHIBIT 6

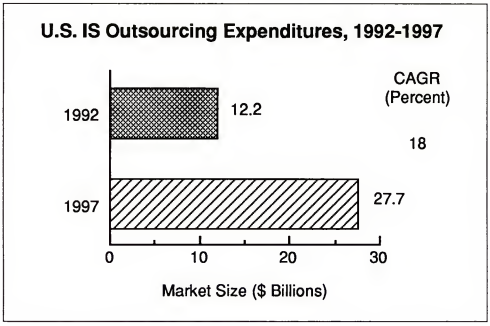
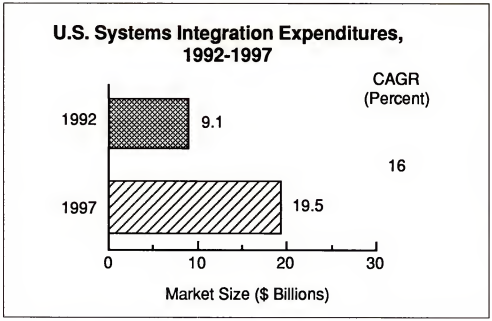


EXHIBIT 7



2. Driving Forces

Exhibit 8 provides a comparison of the forces and factors leading to the use of these services. In turn, these factors suggest some of the characteristics the vendors must have to serve them.

EXHIBIT 8

Driving Forces for Systems Integration and Systems Operations

Category	Systems Integration	Systems Operations
Staff	Scarcity of talents Unique skills	Scarcity of talents
Technology	Unique technology New technology	Increasing complexity New technology
Response	Rapid response	Flexibility of response Disaster recovery
Financial	One-time investment Risk sharing	Economy of scale Investment avoidance
Management	Large and/or unusual project skills needed	Process change skills needed

- Both systems integration and systems operations are proving to be a source of staff and talents not available internally to IS.

- In the technology area, these vendors offer quicker access to new technology for the automation of the data center and data network, or for a new complex systems solution to an operating problem.

  - The technologies available today to improve operations are extensive, but expensive, and require expanded implementation skills. The systems operations vendor can afford to acquire and maintain the necessary capabilities, where many internal organizations cannot.

- The systems integration vendor is proving to be the source of new technology that the internal staff is not equipped to implement.

- The need for responsiveness is being driven by operating management in its struggle to react to business changes. Although subjective, management's reactions provide today's measure of service from the information systems program.

  - Systems integrators offer the ability to meet unexpected requirements without having to expand or divert resources in-house.

  - The systems operations vendor offers greater opportunities to respond to unexpected processing requirements, the flexibility to increase or decrease services on demand, and disaster recovery services.

- The financial driving forces are different for systems integration and outsourcing.

  - With system integration, there is a project-oriented investment and cost.

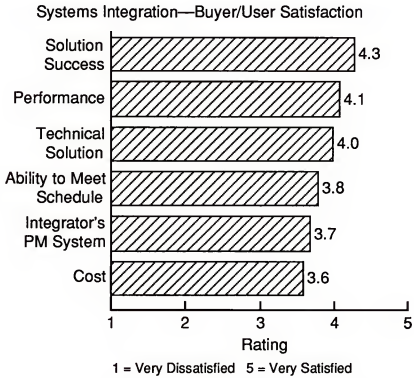
  - With outsourcing, the opportunity exists to postpone major investments, put everything on a pay-as-you-go basis, remove the capital costs from the balance sheet, and gain access to improved economies of scale.

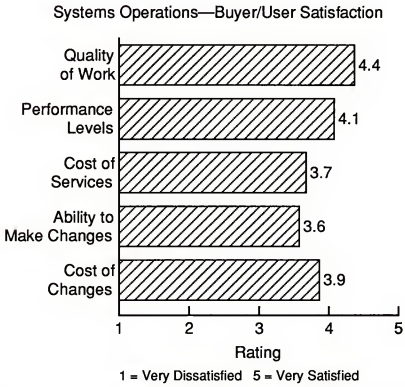
3. Vendor Performance

Research conducted by INPUT in systems integration and systems operations has helped it evaluate the performance of vendors. As shown in Exhibit 9, satisfaction in general is quite high.

EXHIBIT 9

User Satisfaction with Vendor Performance





- The lowest ratings were on costs—but even these were above 3.0 on a scale of 1 to 5. The levels were above the satisfied level, and cost is not the only reason for outsourcing. In many instances cost is a secondary reason.

- The ratings on performance and quality are quite high, exceeding 4 on a scale of 1 to 5.

Although no one suggests that performance is perfect, it is achieving more than satisfactory levels and reinforcing the viability of the outsourcing alternative.

Vendor Approaches to IS Staff Issues

One of the strongest deterrents to an IS manager making an outsourcing decision is the impact on the existing IS staff, which was discussed earlier. A team of professionals that knows the current IS investment, and maintains it at any cost, has great trouble accepting that someone else can do it just as well, if not better. However, in today's fast-paced business world of constant restructuring and work force change, resisting for this reason is unacceptable.

Fortunately, most vendors who are trying to meet application requirements, run a processing utility, maintain applications, and/or operate networks realize how critical this issue can be. They have developed programs to help address this issue, and because of their own business development requirements, are always on the lookout for qualified IS professionals.

Exhibit 10 summarizes the key efforts made by outsourcing vendors to address personnel impacts and issues. Although some vendors are more skilled than others, every vendor works to alleviate this problem. Many of the benefits are the same, regardless of the type of outsourcing decision, but some are more important than others in the various categories.

EXHIBIT 10

Vendor Approaches to IS Staff in Outsourcing

Outsourcing Category	IS Staff Approaches
Applications Management	Absorb key applications staff Provide expanded career opportunities
Systems Operations	Absorb key technical staff Provide outplacement service
Transition Management	Off-load operational management Provide crisis management
Network Management	Strengthen management process Absorb key technical staff
Desktop Services	Absorb end-user computing/help desk staff Provide end-user training and support

- All vendors will consider hiring the staff of the new client.
  - In some instances this is essential, because the vendor will be operating the client's own data center or, more importantly, will be assuming applications maintenance responsibility.

- In all cases it is to the vendor's benefit to work with the new client to identify which staff members are critical and need to stay on the client's staff.

- When employment offers are made, the process is generally regarded as well managed.
  - Vendors offer to extend benefits if there are significant differences from their own benefits programs.
  - Vendors typically have comparable or better pay scales.
  - Vendors generally end up providing a better long-term career path for the IS professional.
  - Vendors have not experienced turnover problems with staff that came to them as a result of an outsourcing agreement.

- One firm is always prepared to offer a structured outplacement program.
  - It uses a firm that specializes in IS professionals and has a proven record of helping the new client keep its employees reasonably satisfied.
  - The human resources executive of this systems operations firm has become a key element in its sales cycle. The vendor's human resources department implements the outplacement program for the client.

- Compared to many internal IS functions, the vendor training programs for users and IS professionals are stronger.

Vendor Capabilities

Outsourcing is not a panacea or the right move for every organization, but it is an alternative that all organizations must assess in the near term. Vendor capabilities and related issues depend on what type of outsourcing decision is under consideration.

In Exhibit 11, the level of importance is evaluated for vendor capabilities in categories of outsourcing. A high importance rating indicates that capability is critical to the success of the outsourcing agreement.

Key vendor capabilities are as follows:

- *Organizational Skills*—Transition management and applications systems operations agreements cause significant upheaval in the internal organization. Progressive vendors provide support in this area to help IS management and internal personnel plan and execute the organizational changes. The outsourcing vendor may want to hire some of the staff and has its own the reputation to protect as well. The closer the involvement with user units, the higher the level of organizational skill required.

EXHIBIT 11

Relative Importance of Outsourcing Vendor Capabilities

Outsourcing Category	Capabilities						
	Organ. Skills	Technology		Application		Sys. Mgmt.	Proj. Mgmt.
		Data Ctr.	Other	Gen'l.	Specific		
Applications Management	M	L	M	H	H	H	H
Systems Operations							
a. Platform	M	H	M	L	L	H	L
b. Applications	H	H	M	H	H	H	H
Transition Management	M/H	H	M	L	L	H	H
Network Management	L	M	H	L	L	H	L
Desktop Services	M/H	L	H	L	L	H	L

H = High Importance, M = Medium Importance, L = Low Importance

- *Technology - Data Center*—The data center capabilities required today are far more extensive than in traditional facilities management. Proven capability to shut down a data center and integrate it into a processing utility is required for systems operations. A management control system must exist to assure the contracted performance levels are achieved.

- *Technology - Other*—Other technology issues are important and can be critical to a successful relationship. Telecommunications skills are essential to network management, and skills in client/server and downsizing are vital to desktop services.

- *Application Knowledge - General*—Broad application knowledge is of great importance only in applications management and systems operations relationships where the entire suite of application systems is to be supported, and will possibly be replaced.

- *Application Knowledge - Specific*—Specific application knowledge is most important to the applications management process, with or without systems operations. It is an ingredient of success and the client should not have to teach the vendor's staff.

- *Systems Management*—As noted previously, it is management skills (systems management) that are being purchased through outsourcing. If IS has to manage the vendor day by day, a key advantage of outsourcing is lost. In an applications management or systems operations agreement, the final test of success will be the vendor's ability to fully manage the operation and provide the service levels specified. In the end, all other issues become secondary.

- *Project Management*—This is a fundamental skill required in any information systems program or project. It is of critical importance to those outsourcing relationships that are objective based: transition management, applications management, and application systems operations.

Vendors are working hard to strengthen their capabilities on a number of fronts. Their business is to manage information systems projects, programs, and operations; and it is through disciplined management that they can provide a valued set of products and services.

Vendor Selection

Having made a decision to seriously consider outsourcing, the next step is the vendor selection process.

The components of the outsourcing requirements are the initial set of criteria for vendor assessment. Exhibit 12 provides a sample list of the standard components of most systems outsourcing decisions.

EXHIBIT 12

Components of an Outsourcing Decision

- Tangible components
  - Hardware
  - Software
    - Systems
    - Applications
  - Personnel
  - Telecommunications
  - Facilities
- Process components
  - Security/disaster recovery
  - Planning
  - Change management
  - Control
  - Communications/reporting
  - Organizations/location
- Financial components
  - Specified costs
  - Unspecified costs
  - Capital acquisitions/transfers
  - Lease transfer
  - Price/inflation changes
- Management components
  - Conversion plans
  - Exit/contingency plan
- Cultural components

- Taking the time to create an initial requirements specification for each of these standard components, as well as any unique components, will provide a foundation for understanding and comparison.

- The same requirements specification provides the basis for a true evaluation of whether to continue to insource the portion of IS activity under study.

- The requirements specification will also identify the critical elements and type of vendor relationship required should outsourcing result.

Exhibit 13 ranks the criteria used to evaluate vendors.

EXHIBIT 13

Systems Operations
Vendor Evaluation Criteria

Ranking	Criteria
1	Vendor Systems Operations experience
2	Overall cost
3	Data security and protection
4	If SI contract, SO by prime contractor
5	Vendor provided hardware and software maintenance
6	Application software repair
7	Application software improvements
8	Reduced capital investment
9	Cash flow improvements
10	SO performed in client's facility
11	Labor relations/unions
12	SO performed at vendor location

- Not surprisingly, prior experience in systems operations and overall cost received the highest ranking. The experience criteria include proven management capability.

- The least important criterion was where the systems operations was to be performed. Once you decide to have someone else operate the processing utility, it doesn't really matter where it is located. The key measurement becomes service level, not location.

- The linking of systems integration and systems operations, as indicated by the fourth-ranked evaluation criterion, is further validation of the linking of these services by the customer.

Exhibit 14 depicts similar results concerning the selection of systems integration vendors. Four of the first five criteria map directly to the objective-based relationship that is the basis for systems integration.

EXHIBIT 14

Systems Integration Vendor Selection Criteria

Ranking	Criteria
1	Industry experience
2	Application knowledge
3	Cost/performance
4	SI experience
5	Project management skills
6	Support skills
7	Service orientation
8	On-site visits
9	References
10	Alliances

- Without the combination of industry, application-specific, and project-oriented experience required for success, there is little reason to keep the vendor on the list.

- The second tier of criteria tends to deal with either the ability to counter potential weaknesses through alliances, or verification that the vendor has performed efforts of similar complexity.

Management Component of Outsourcing

At a number of points in this report INPUT has noted the changes occurring in the management component of outsourcing offerings. Exhibit 15 clarifies the changes.

In traditional offerings from vendors, the management component was modest at the most.

EXHIBIT 15

Management Component of Outsourcing Offerings

Management Component	Vendor Offerings
Strategic	Systems management
Tactical	Applications management Transition management
Operational	Applications maintenance Systems operations Network management
Technical Support	Network management Desktop services Systems operations

- In the applications software products, turnkey systems, contract programming, processing services and network services there was little if any IS management provided. Support following the purchase was technical in nature.

- With the growth in professional services from contract programming to actual applications development, a project management component was introduced. It was part of the service purchased by information systems.

- Only in the facilities management area was there any operational management contribution.

In the current offerings of systems integration and outsourcing, the management component becomes more dominant.

- The project management component expanded in size and importance with the emergence of systems integration. By turning to a single vendor, who in turn may subcontract, the information systems unit is transferring the majority of the project management task to the systems integrator. The vendor interface is with a senior IS and/or non-IS manager and is limited to a specific project.

- Today's systems operations agreements provide for significant operational management. The data center and data network are managed by the vendor on a full, day-to-day basis. Management is performed by the customer looking at a wider time horizon and specifically measuring performance levels.

With the newer categories of outsourcing, the management component is again growing.

- In an applications management agreement, the operational management component typically includes a direct, day-to-day interface with the user and a 24-hour interface with the data center. Internal IS management steps back to a measurement and planning role.

- For applications management and transition management, the management relationship reaches the tactical level. The vendor is directly involved and impacts the entire information systems program. The management component goes beyond day-to-day to short-term plans and decisions. The vendor interface now spans most or all levels of internal IS management and has many of the elements required to form a partnership.

- In systems management contracts, partnership is achieved. The vendor is involved in all levels of the information systems program and is providing a strategic, tactical, and operational management component.

- Beyond this, in business operations outsourcing, the partnership is expanded to include non-IS functions or processes.